

We claim:

1. A medical device, comprising:

5 a flexible body, having

a proximal end;

a distal end;

a longitudinal axis; and

10 a flexible elongate member defined by an aperture extending

longitudinally in the body, the member being radially expandable with

15 respect to the longitudinal axis;

the device defining an eccentric lumen, at least a portion of the eccentric lumen being offset from the longitudinal axis.

2. The medical device of claim 1, wherein the flexible elongate member provides

15 an undulating surface when in an expanded state.

3. The medical device of claim 1, wherein the eccentric lumen is disposed within the flexible elongate member.

20 4. The medical device of claim 1, wherein a portion of a wall forming the eccentric lumen is perforated.

25 5. The medical device of claim 1, wherein the device is transitionable between an unexpanded state and an expanded second state by longitudinal displacement of a guidewire in the eccentric lumen.

6. The medical device of claim 1, wherein a portion of the device is bioabsorbable.

7. The medical device of claim 1, further comprising an insert removably 30 disposable in the eccentric lumen.

8. The medical device of claim 7, wherein the insert is releasably affixed to at least one of the proximal end and the distal end of the device.

9. The medical device of claim 7, wherein the insert comprises a stiffener.

10. The medical device of claim 9, wherein the stiffener holds the device in an
5 unexpanded state.

11. The medical device of claim 1, further comprising a second lumen.

12. The medical device of claim 11, further comprising an insert removably
10 disposable in the second lumen.

13. The medical device of claim 11, wherein the device is transitionable between a
first state and a second state by longitudinal displacement of the guidewire.

15 14. The medical device of claim 12, wherein the insert comprises a tool.

15. The medical device of claim 1, wherein the eccentric lumen is formed of a
flexible member body affixed to the device.

20 16. The medical device of claim 1, wherein at least one of the proximal end and the
distal end is sealed.

17. The medical device of claim 16, wherein a sealed end is openable by
longitudinal displacement of a guidewire disposed in the eccentric lumen.

25 18. The medical device of claim 1, wherein the flexible elongate member is
disposed helically about the longitudinal axis.

19. The medical device of claim 1, wherein the body has a plurality of flexible
30 elongate members, which members are defined by a plurality of apertures extending
longitudinally in the body, and which members are reversibly radially expandable with
respect to the longitudinal axis.

20. The medical device of claim 1, further comprising a therapeutic agent disposed in the eccentric lumen.

21. The medical device of claim 1, wherein the flexible elongate member comprises 5 a proximal end and a distal end, and at least one of the proximal end and the distal end is sealed.

22. The medical device of claim 1, wherein the body is formed by a plurality of tubes arranged in an annular configuration.

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23. The medical device of claim 1, wherein the device is formed at least in part of polyurethane.

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24. The medical device of claim 1, wherein the device is formed at least in part of 10 percent barium to make the device radiopaque.

25. A method of making a stent, comprising:

20 forming a flexible body of the stent, the flexible body having a longitudinal axis, the stent defining an eccentric lumen, at least a portion of the eccentric lumen being offset from the longitudinal axis;

creating at least one longitudinally extending aperture in a wall of the flexible body, the aperture penetrating the wall and defining at least one elongate flexible member in the wall;

25 expanding the elongate member to an expanded state; and

heating the stent to a temperature sufficient to induce a shape memory of the expanded state.

26. The method of claim 25, wherein forming includes affixing a flexible member body to the flexible body, the flexible member body defining a wall of the eccentric lumen.

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27. The method of claim 25, wherein forming includes forming a second lumen in the flexible body.

28. The method of claim 25, wherein forming the flexible body comprises extruding the flexible body.

29. The method of claim 25, wherein forming comprises arranging a plurality of 5 tubes in an annular configuration.

30. The method of claim 25, wherein creating comprises cutting the aperture with a blade, a laser, or a water jet.

10 31. The method of claim 25, wherein creating comprises locating the eccentric lumen in the elongate flexible member.

32. The method of claim 25, further comprising disposing an insert in the eccentric lumen.

15 33. The method of claim 25, further comprising disposing a therapeutic agent in the eccentric lumen.

20 34. The method of claim 25, wherein expanding includes twisting the flexible body.

35. The method of claim 25, wherein expanding includes contracting the flexible body with respect to the longitudinal axis, thereby causing the elongate flexible member to expand radially.

25 36. A method for dilating a passageway, comprising:

guiding in the passageway a stent, the stent comprising a flexible body having a wall and a longitudinal axis, a portion of the wall defining a radially expandable elongate flexible member, the stent further comprising an eccentric lumen, at least a portion of the eccentric lumen being offset from the longitudinal axis; and

30 expanding the elongate flexible member, thereby dilating the passageway.

37. The method of claim 36, wherein advancing includes disposing the guidewire in the eccentric lumen of the stent.

38. The method of claim 36, wherein expanding includes twisting the flexible body.

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39. The method of claim 36, wherein expanding includes contracting the flexible body with respect to the longitudinal axis, thereby causing the elongate flexible member to expand radially.

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40. The method of claim 36, wherein expanding includes removing an insert from the eccentric lumen.

41. The method of claim 40, wherein an insert is inserted into the eccentric lumen to straighten or contract the device radially before guiding.

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